

GOMPHOLOBIUM INCONSPICUUM (FABACEAE: MIRBELIEAE), A NEW SPECIES FROM SOUTH-EASTERN AUSTRALIA

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ABSTRACT

Crisp, Michael D. *Gompholobium inconspicuum* (Fabaceae: Mirbelieae), a new species from south-eastern Australia. *Muelleria* 8(3): 307–310 (1995). — *Gompholobium inconspicuum*, occurring along the eastern side of the ranges from the central coast of New South Wales to eastern Gippsland in Victoria, is described as new. It is distinguished from its parapatric (more northerly) relative *G. uncinatum* by its greenish yellow petals, subulate recurved stipules, and earlier flowering season.

GOMPHOLOBIUM INCONSPICUUM

***Gompholobium inconspicuum* Crisp, sp. nov.**

Gompholobium sp. B, Wiecek, *Fl. New South Wales* 2: 470 (1991).

Habitu humile diffusum, foliis foliolis tribus linearibus uncinatis, caulibus juvenibus fere glabris sed dense tuberculatis, floribus parvis (c. 1 cm longis) et carina glabra *G. uncinato* Cunn. ex Benth. maxime simile, differt petalis citrinis, stipulis visibilibus subulatis recurvis, florescentia a mense Iulio ad mensem September.

TYPUS: New South Wales, Central Coast, c. 15 km N of Windsor, Blaxland Ridge, 0.5 km W of turn-off from Putty Rd, 33°28'S, 150°48'E, 1 Aug. 1994, M.D. Crisp 8542 (HOLOTYPE: CBG; ISOTYPE: BRI, CANB, GAUBA, K, L, MEL, MO, NSW).

Shrubs with diffuse wiry erect, spreading or prostrate stems to 45 cm long; branches terete, glabrate, densely tuberculate. *Leaves* scattered, sessile, digitately trifoliate; leaflets ascending, linear, with an acuminate recurved apex, recurved margins, tapered to the base, 3–10 mm long, 0.2–1 mm broad, lacking visible veins, rather thick, grey-green; petioles appressed, 0.3–1 mm long; petiolules pulvinate, minute (c. 0.2 mm long); stipules subulate, 0.2–0.5 mm long. *Inflorescences* numerous, terminal, each a raceme with 1–2(3) flowers; peduncle tuberculate, 0–3 mm long, bearing a few sterile bracts below the subtending bracts; pedicel smooth, 2–6 mm long, with a pair of bracteoles near the base; bracts and bracteoles subulate, 0.5–1.5 mm long. *Buds* ellipsoid, apiculate, not ridged at junction of valvate calyx-lobes. *Flowers* inconspicuous, seldom opened fully. *Calyx* 5–6 mm long, divided to within 1 mm of base into 5 equal triangular acuminate lobes with ciliolate margins, lead-grey externally. *Standard* partly conduplicate at anthesis, very broad- to depressed-ovate, emarginate, 7–9 mm long including the 0.5–1 mm claw, 8–12 mm broad, lemon-yellow adaxially, lead-grey abaxially; wings narrow-obovate to somewhat spatulate, 5–7 mm long including the 0.5 mm claw, 1–3 mm broad, with an adaxial lobe at the base, lemon-yellow; keel obovate to elliptic, 6.5–7.5 mm long including the 1.5 mm claws, 3–3.5 mm broad, green, with an adaxial lobe at the base. *Stamens* 10, free, uniform; filaments filiform; anthers versatile, with a conspicuous brownish connective. *Gynoecium* glabrous, 7 mm long including 0.7 mm stipe and 2 mm style; style strongly incurved; stigma terminal, minute, papillate; ovary narrow-cylindric, obtuse at apex, tapered to base; ovules 12–20 in two rows on thick reflexed funicles. *Pod* oblong-ellipsoid, turgid, 8–11 mm long, 6–7 mm diam., smooth, light brown infused with lead-grey; immature seed ellipsoid with a strong radicular lobe, c. 1.2 mm long, c. 0.8 mm diam.; testa minutely rugulose, blistered around hilum; aril absent. (Fig. 1)

FLOWERING PERIOD

From July (in the north) until September (in the south and on the tablelands).

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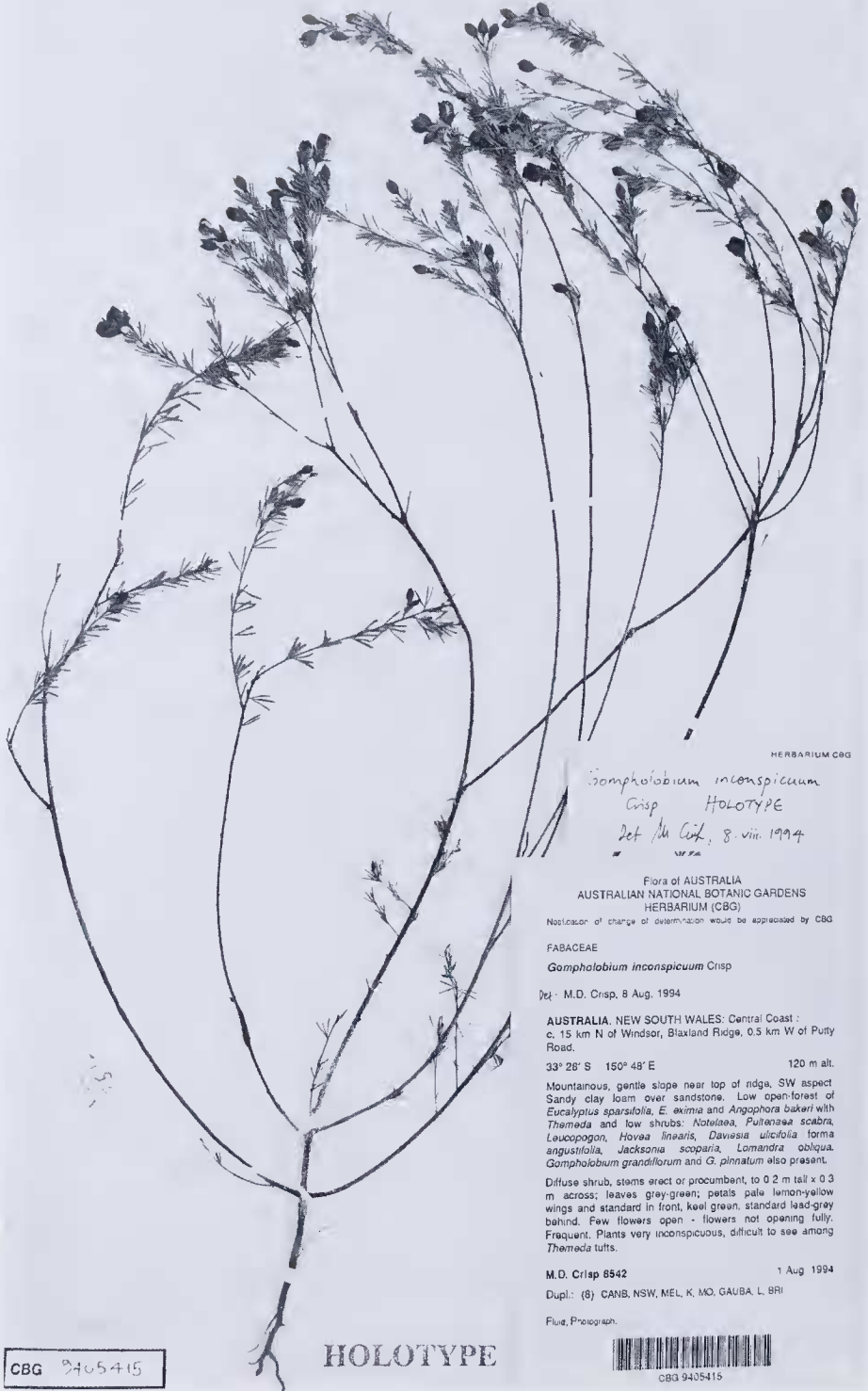


Figure 1. The holotype of *Gompholobium inconspicuum*.

FRUITING PERIOD

September to ?November.

ETYMOLOGY

The specific epithet is from the Latin for inconspicuous, and refers to the plant as well as its flowers. At the type locality, plants were so inconspicuous among the *Themeda* tufts that it took me 45 minutes to begin finding them, even though many proved to be present.

SPECIMENS EXAMINED

New South Wales — Kanimbla Valley, 28 Sep. 1962, *C. Burgess s.n.* (CBG 009617, MEL 233954); Marulan, 17 Oct. 1962, *C. Burgess s.n.* (NSW 282568); Howes Valley Post Office, 7 Sep. 1963, *C. Burgess s.n.* (CBG 001371); Mogo State Forest, 1975, *Batemans Bay Forestry Office 196* (NSW); SW corner of Castlereagh State Forest, off the Northern Road, 13 Sep. 1984, *R. Coveny 11880 & S. Goodwin* (CBG, NSW); Cullulla, c. 15 miles [24 km] by road SSW of Bungonia, 22 Sep. 1965, *D.J. McGillivray 1443* (NSW); Bungonia to Marulan, 16 Sep. 1953, *C.W.E. Moore 2601* (NSW); Marulan to Tallong, 19 Sep. 1953, *C.W.E. Moore 2604* (NSW); 9 miles [15 km] W of Kingswood [between Windsor and Kingswood], 13 Aug. 1960, *M.D. Tindale s.n.* (NSW 282561); Blaxland Ridge, N of Windsor, 15 July 1961, *L.H. Williams 2A-C* (NSW); Kanimbla Valley, Sep. 1963, *L.H. Williams s.n.* (NSW 282565); 4 miles [6.5 km] N of Tinda Creek on Windsor-Singleton rd, Sep. 1963, *L.H. Williams s.n.* (NSW 282558); Howes Valley, 55 miles [88.5 km] S of Singleton on the Putty Rd, 12 Sep. 1963, *L.H. Williams s.n.* (NSW 282560).

Victoria — East Gippsland, c. 2 km SW of Yambulla Peak, 9 Sep. 1988, *N.G. Walsh 2134, D. Albrecht & J. Westaway* (CBG, MEL, NSW); East Gippsland, Upper Genoa River, c. 2 km upstream from Yambulla Creek confluence, 21 Oct. 1987, *N.G. Walsh 1819* (CBG, MEL).

DISTRIBUTION AND CONSERVATION STATUS

Along the coast and eastern scarp of the ranges from the Putty Road area on the Central Coast of New South Wales to the Genoa River in far East Gippsland, Victoria. Known populations are few and scattered, with most collections coming from either the Putty Road or the Marulan-Bungonia area in New South Wales. However, the plants are so difficult to see, even when in flower, that it would be premature to declare the species rare or threatened. At the type locality the population appears to be large, with approximately one plant per square metre over a moderate-sized area.

HABITAT

On poor sandy, gravelly, rocky or clayey soils derived from sedimentary rock, usually sandstone. Associated vegetation is open (dry sclerophyll) eucalypt forest with shrubby understorey. The type locality is the upper south slope of a low ridge with sandy clay soil over sandstone. There, *G. inconspicuum* is mixed with *Themeda triandra* tufts under a low open-forest of *Eucalyptus sparsifolia*, *E. eximia*, *Allocasuarina littoralis* and *Angophora bakeri*, with scattered understorey shrubs including *Acacia* spp., *Daviesia ulicifolia*, *Gompholobium grandiflorum*, *G. pinnatum*, *Hakea* sp., *Hovea linearis*, *Leucopogon* sp., *Lomandra obliqua*, *Lomatia silaifolia*, *Notelea* sp. and *Pultenaea scabra*.

AFFINITY

This species has been known for about 40 years, and for most of that period has been recognised as closely related to, but distinct from *G. uncinatum*. Features held in common by these species, and which together distinguish them from their congeners, include a low, diffuse habit, trifoliolate leaves with linear uncinuate leaflets, glabrous but densely tuberculate young stems, small flowers c. 1 cm long, and a glabrous keel. These species have a parapatric distribution, with *G. uncinatum* extending from the Blue Mountains north to south-east Queensland. *Gompholobium uncinatum* differs in having more or less red petals, and in appearing to lack stipules. In addition, it flowers later, from November until early summer.

Gompholobium minus and *G. ecostatum* also appear rather similar to *G. inconspicuum*, but both differ in having larger flowers and more or less dense, short spreading hairs along the stems. In addition, *G. minus* has ridges at the junction of the calyx-lobes

in bud, whilst *G. ecostatum* has apricot to orange-red petals. *Gomphlobium glabratum* is superficially similar, but has pinnate leaves with 5 or more lobes.

Among the related species discussed above, only *G. ecostatum* has visible stipules, and they are spreading. Thus, the strongly recurved stipules are the most distinctive feature of *G. inconspicuum*.

A key distinguishing all the above species except *G. ecostatum* appears in Wiecek (1991).

ACKNOWLEDGEMENT

I wish to thank the curators of CBG, MEL and NSW for the loan of specimens.

REFERENCE

Wiecek, B. (1991). *Gomphlobium*. In: Harden, G.J. (ed) *Flora of New South Wales*, Volume 2. (Royal Botanic Gardens: Sydney.) pp. 468–470.

Manuscript accepted 26 August 1994.